by other heat paths. The apex of the flame must be directed at the center of the plate.

- (4) Before exposure to the simulated torch, none of the temperature recording devices may indicate a plate temperature in excess of 37.8 °C (100 °F) or less than 0 °C (32 °F).
- (5) A minimum of two thermocouples must indicate 427 °C (800 °F) in four minutes, plusor-minus 30 seconds, of torch simulation exposure.
- b. A thermal protection system must be tested in the simulated torch-fire environment described in paragraph 3a of this appendix in the following manner:
- (1) The thermal protection system must cover one side of the bare plate identical to that used to simulate a torch fire under paragraph 3a(2) of this appendix.
- (2) The back of the bare plate must be instrumented with not less than nine thermocouples placed as described in paragraph 3a(2) of this appendix to record the thermal response of the material.
- (3) Before exposure to the simulated torch, none of the thermocouples on the back side of the thermal protection system configuration may indicate a plate temperature in excess of 37.8 $^{\circ}$ C (100 $^{\circ}$ F) nor less than 0 $^{\circ}$ C (32 $^{\circ}$ F).
- (4) The entire outside surface of the thermal protection system must be exposed to the simulated torch-fire environment.
- (5) A torch-simulation test must be run for a minimum of 30 minutes. The thermal protection system must retard the heat flow to the plate so that none of the thermocouples on the backside of the bare plate indicate a plate temperature in excess of 427 $^{\circ}$ C (800 $^{\circ}$ F).
- (6) A minimum of two consecutive successful torch-simulation tests must be performed for each thermal protection system.

[Amdt. 179–50, 60 FR 49078, Sept. 21, 1995]

PART 180—CONTINUING QUALI-FICATION AND MAINTENANCE OF PACKAGINGS

Subpart A—General

Sec.

180.1 Purpose and scope.

180.2 Applicability.

180.3 General requirements.

Subparts B-C [Reserved]

Subpart D—Qualification and Maintenance of Intermediate Bulk Containers

180.350 Applicability.

180.351 Qualification of intermediate bulk containers.

180.352 Requirements for retest and inspection of intermediate bulk containers.

Subpart E—Qualification and Maintenance of Cargo Tanks

180.401 Applicability.

180.403 Definitions.

180.405 Qualification of cargo tanks.

180.407 Requirements for test and inspection of specification cargo tanks.

180.409 Minimum qualifications for inspectors and testers.

180.411 Acceptable results of tests and inspections.

180.413 Repair, modification, stretching, or rebarrelling of cargo tanks.

180.415 Test and inspection markings.

180.417 Reporting and record retention requirements.

Subpart F—Qualification and Maintenance of Tank Cars

180.501 Applicability.

180.503 Definitions.

180.505 Quality assurance program.

180.507 Qualification of tank cars.

180.509 Requirements for inspection and test of specification tank cars.

180.511 Acceptable results of inspections and tests.

180.513 Repairs, alterations, conversions, and modifications.

180.515 Markings.

180.517 Reporting and record retention requirements.

180.519 Periodic retest and inspection of tank cars other than single-unit tank car tanks.

AUTHORITY: 49 U.S.C. 5101-5127; 49 CFR part 1.53.

Source: Amdt. 180–2, $54\ FR\ 25032$, June 12, 1989, unless otherwise noted.

Subpart A—General

§180.1 Purpose and scope.

This part prescribes requirements pertaining to the maintenance, reconditioning, repair, inspection and testing of packagings, and any other function having an effect on the continuing qualification and use of a packaging under the requirements of this subchapter.

§180.2 Applicability.

- (a) Any person who performs a function prescribed in this part shall perform that function in accordance with this part.
- (b) Any person who performs a function prescribed in this part is considered subject to the regulations of this subchapter when that person—

§ 180.3

- (1) Makes any representation indicating compliance with one or more of the requirements of this part; or
- (2) Reintroduces into commerce a packaging that bears markings indicating compliance with this part.

[Amdt. 180-2, 54 FR 25032, June 12, 1989, as amended by Amdt. 180-2, 56 FR 27877, June 17, 1991]

§180.3 General requirements.

- (a) No person may represent, mark, certify, sell, or offer a packaging or container as meeting the requirements of this part, or an exemption pertaining to this part issued under subchapter A of this chapter, whether or not the packaging or container is intended to be used for the transportation of a hazardous material, unless it is marked, maintained, reconditioned, repaired, or retested, as appropriate, in accordance with this part, an approval issued thereunder, or an exemption issued under subchapter A of this chapter.
- (b) The representations, markings, and certifications subject to the prohibitions of paragraph (a) of this section include:
- (1) Identifications that include the letters "DOT", "MC", "ICC", or "UN";
- (2) Exemption, approval, and registration numbers that include the letters "DOT";
- (3) Test dates displayed in association with specification, registration, approval, or exemption markings indicating conformance to a test or retest requirement of this subchapter, an approval issued thereunder, or an exemption issued under subchapter A of this chapter;
- (4) Documents indicating conformance to the testing, inspection, maintenance or other continuing qualification requirements of this part; and
- (5) Sales literature, including advertising, indicating that the packaging or container represented therein conforms to requirements contained in subchapter A or C of this chapter.

[Amdt. 180-2, 54 FR 25032, June 12, 1989, as amended by Amdt. 180-3, 58 FR 33306, June 16, 1993]

Subparts B-C [Reserved]

Subpart D—Qualification and Maintenance of Intermediate Bulk Containers

SOURCE: Amdt. 180-5, 59 FR 38079, July 26, 1994, unless otherwise noted.

§180.350 Applicability.

This subpart prescribes requirements, in addition to those contained in parts 107, 171, 172, 173, and 178 of this chapter, applicable to any person responsible for the continuing qualification, maintenance, or periodic retesting of an intermediate bulk container.

§ 180.351 Qualification of intermediate bulk containers.

- (a) *General.* Each intermediate bulk container used for the transportation of hazardous materials must be an authorized packaging.
- (b) Intermediate bulk container specifications. To qualify as an authorized packaging, each intermediate bulk container must conform to this subpart, the applicable requirements specified in part 173 of this subchapter, and the applicable requirements of subparts N and O of part 178 of this subchapter.

§180.352 Requirements for retest and inspection of intermediate bulk containers.

- (a) General. Each intermediate bulk container constructed in accordance with a UN standard for which a test or inspection specified in paragraphs (b)(1), (b)(2) and (b)(3) of this section is required may not be filled and offered for transportation or transported until the test or inspection has been successfully completed. This paragraph does not apply to any intermediate bulk container filled prior to the test or inspection due date. The requirements in this section do not apply to DOT 56 and 57 portable tanks.
- (b) Test and inspections for metal, rigid plastic, and composite intermediate bulk containers. Each intermediate bulk container is subject to the following test and inspections:
- (1) The leakproofness test prescribed in §178.813 of this subchapter must be conducted every 2.5 years starting from